What is claimed is:

1. A system for injecting catalyst and/or additives into a fluidized catalytic cracking unit, comprising:

a dust collector in fluid communication with at least one storage bin holding one of the catalyst and/or additives;

a vacuum producer in fluid communication with the dust collector so that the vacuum producer generates a vacuum within the dust collector that draws the one of the catalyst and/or additives into the dust collector; and

a transfer pot in fluid communication with the dust collector for receiving the one of the catalyst and/or additives from the dust collector, the transfer pot being in fluid communication with the fluidized catalytic cracking unit and a source of pressurized air so that the one of the catalyst and/or additives is transferred to the fluidized catalytic cracking unit in response to a pressure differential between the transfer pot and the fluidized catalytic cracking unit.

2. The system of claim 1, further comprising a hose coupled to the dust collector and the storage bin so that the dust collector and the storage bin are in fluid communication by way of the hose.

3. The system of claim 2, further comprising a first valve coupled to the hose for isolating the dust collector from the storage bin on a selective basis.

4. The system of claim 1, wherein the dust collector comprises a filter in fluid communication with the vacuum producer so that the filter collects dust from within the dust collector.

5. The system of claim 1, further comprising a volume chamber and moisture trap for drying air supplied by the source of pressurized air.

6. The system of claim 1, further comprising a plurality of load cells for measuring a weight of the dust collector, the transfer pot, and the one of the catalyst and/or additives drawn into the dust collector.

7. The system of claim 6, further comprising a cabinet for housing the dust collector and the transfer pot, wherein the dust collector and the transfer pot are mounted on a plurality of legs, each of the legs is secured to a common plate, the plate is mounted on the load cells, and the load cells are mounted on a base of the cabinet.

8. The system of claim 1, wherein:

the dust collector comprises a substantially cylindrical upper portion and an adjoining, substantially conical lower portion; and

the transfer pot comprises a substantially cylindrical upper portion adjoining the lower portion of the dust collector, and substantially conical lower portion adjoining the upper portion of the transfer pot.

9. The system of claim 8, wherein the lower portion of the dust collector has an opening formed therein for permitting the one of the catalyst and/or additives to flow from the dust collector to the transfer pot.

10. The system of claim 9, further comprising a valve for covering the opening on a selective basis, the valve having a plug movable between an upper and a lower position in response to impingement of the pressurized air thereon.

11. The system of claim 8, wherein the lower portion of the transfer pot has an opening formed therein for permitting the one of the catalyst and/or additives to flow from the transfer pot to the fluidized catalytic cracking unit.

12. The system of claim 6, where the vacuum producer is in fluid communication with the source of pressurized air, and the system further comprises:

a first valve for isolating the vacuum producer from the source of pressurized air on a selective basis;

a second valve for isolating the transfer pot from the source of pressurized air on a selective basis;

a third valve for isolating the transfer pot from the fluidized catalytic cracking unit on a selective basis;

a fourth valve for isolating the dust collector from the storage bin on a selective basis; and

a controller electrically coupled to the load cells and respective actuators of the first, second, third, and fourth valves for controlling the operation of the first, second, third, and fourth valves.

13. The system of claim 12, wherein the controller:

generates a first control input to cause the first valve to open;

generates a second and a third control input that cause the respective first and the fourth valves to close after a predetermined amount of the one of the catalyst and/or additives has been drawn into the dust collector;

generates a fourth control input that causes the second valve to open to pressurize the transfer pot;

generates a fifth control input that causes the second valve to close after a pressure differential between the transfer pot and a regenerator of the fluidized catalytic cracking unit reaches a predetermined value; and

generates a fifth control input that causes the third valve to open.

14. The system of claim 2, further comprising:

another of the hoses coupled to the dust collector and another of the storage bins so that the dust collector and the another of the storage bins are in fluid communication by way of the another of the hoses; and

a manifold coupled in fluid communication with the dust collector and the hoses for placing the hoses in fluid communication with the dust collector on a selective basis.

15. The system of claim 1, wherein the dust collector and the transfer pot each comprise a respective sidewall.

16. The system of claim 1, wherein the at least one storage bin and the dust collector are non-adjoining.

17. The system of claim 1, wherein the dust collector adjoins the transfer pot.

18. A system for storing and loading catalyst and/or additives into a fluidized catalytic cracking unit, comprising a storage bin for storing at least one of the catalyst and/or additives at a first location, and a loading unit positioned in a second location remote from the first location, the loading unit being in fluid communication with the storage bin and the fluidized catalytic cracking unit on a selective basis, wherein the loading unit is capable of being evacuated so that a resulting vacuum within the loading unit draws the at least one of the catalyst and/or additives from the storage bin, and the loading unit is capable of being pressurized so that the least one of the catalyst and/or additives is transferred from the loading unit to the fluidized catalytic cracking unit.

19. The system of claim 18, wherein the loading unit comprises a dust collector and a transfer pot.

20. The system of claim 18, further comprising a vacuum producer for evacuating the loading unit.

21. The system of claim 20, wherein the dust collector comprises a filter in fluid communication with the vacuum producer for collecting dust generated by transfer of the at least one of the catalyst and/or additives from the storage bin to the dust collector.

22. The system of claim 18, further comprising a plurality of load cells for measuring a weight of the loading unit and the one of the catalyst and/or additives in the loading unit.

23. The system of claim 18, further comprising a cabinet for housing the loading unit, wherein the loading unit is mounted on a plurality of legs, each of the legs is secured to a common plate, the plate is mounted on the load cells, and the load cells are mounted on a base of the cabinet.

24. The system of claim 19, wherein:

the dust collector comprises a substantially cylindrical upper portion and an adjoining, substantially conical lower portion; and

the transfer pot comprises a substantially cylindrical upper portion adjoining the lower portion of the dust collector, and substantially conical lower portion adjoining the upper portion of the transfer pot.

25. The system of claim 24, wherein the lower portion of the dust collector has an opening formed therein for permitting the one of the catalyst and/or additives to flow from the dust collector to the transfer pot as the at least one of the catalyst and/or additives is drawn into the dust collector from the storage bin, and the system further comprises a valve for covering the opening on a selective basis, the valve having a plug movable between an upper and a lower position in response to impingement of pressurized air thereon.

26. The system of claim 24, wherein the lower portion of the transfer pot has an opening formed therein for permitting the one of the catalyst and/or additives to flow from the transfer pot to the fluidized catalytic cracking unit.

27. The system of claim 19, wherein the dust collector and the transfer pot each comprise a respective sidewall.

28. The system of claim 18, wherein the second location is located no more than approximately twenty feet from the first location.

29. The system of claim 18, wherein the system comprise at least two of the storage bins.

30. The system of claim 29, wherein the loading unit further comprises a manifold for placing the loading unit in fluid communication with the at least two of the storage bins on a selective basis.

31. The system of claim 19, wherein the dust collector adjoins the transfer pot.

32. A system for loading catalyst and/or additives into a fluidized catalytic cracking unit, comprising:

a first bin for storing a first of the catalyst and/or additives;

a second bin for storing a second of the catalyst and/or additives;

a loading unit in fluid communication with the first and second bins and the fluidized catalytic cracking unit;

a first valve for isolating the first bin from the loading unit on a selective basis;

a second valve for isolating the second bin from the loading unit on a selective basis; and

a third valve for isolating the loading unit from the fluidized catalytic cracking unit on a selective basis.

33. The system of claim 32, further comprising a manifold comprising the first and second valves.

34. The system of claim 32, wherein the loading unit is capable of maintaining a vacuum therein so that the first and second of the catalyst and/or additives can be drawn into the loading unit from the respective first and second bins by the vacuum, and the loading unit is capable of being pressurized so that the first and second of the catalyst and/or additives can be injected into the fluidized catalytic cracking unit in response to pressurization of the loading unit.

35. The system of claim 32, further comprising first and second hoses for coupling the respective first and second bins to the loading unit.

36. The system of claim 34, wherein the loading unit comprises a dust collector and a transfer pot.

37. The system of claim 36, wherein the dust collector is capable of maintaining a vacuum therein so that the first and second of the catalyst and/or additives can be drawn into the dust collector from the respective first and second bins by the vacuum, and the transfer pot is capable of being pressurized so that the first and second of the catalyst and/or additives can be injected into the fluidized catalytic cracking unit in response to pressurization of the transfer pot.

38. The system of claim 34, further comprising a vacuum producer for generating the vacuum within the loading unit.

39. The system of claim 36, wherein the dust collector comprises a filter for collecting dust generated by transfer of the at least one of the catalyst and/or additives from the respective first and second bins and into the loading unit.

40. The system of claim 34, further comprising a volume chamber and moisture trap for drying air used to pressurize the loading unit.

41. The system of claim 32, further comprising a controller, the controller being electrically coupled to respective actuators of the first, second, and third valves so that the controller can open and close the first, second, and third valves.

42. The system of claim 36, wherein:

the dust collector comprises a substantially cylindrical upper portion and an adjoining, substantially conical lower portion; and

the transfer pot comprises a substantially cylindrical upper portion adjoining the lower portion of the dust collector, and substantially conical lower portion adjoining the upper portion of the transfer pot.

43. The system of claim 36, wherein the transfer pot and the dust collector each comprise a respective sidewall.

44. The system of claim 32, wherein the first bin and the loading unit are non-adjoining, and the second bin and the loading unit are non-adjoining.

45. The system of claim 36, wherein the dust collector adjoins the transfer pot.

46. A system for introducing catalyst and/or additives into a fluidized catalytic cracking unit, comprising:

dust collecting means in fluid communication with a storage bin holding one of the catalyst and/or additives;

vacuum producing means in fluid communication with the dust collecting means so that the vacuum producing means draws the one of the catalyst and/or additives into the dust collecting means; and

means for receiving the one of the catalyst and/or additives from the dust collecting means and injecting the one of the catalyst and/or additives into the fluidized catalytic cracking unit.

47. A process for introducing catalyst and/or additives into a fluidized catalytic cracking unit, comprising:

generating a vacuum within a loading unit;

drawing one of the catalyst and/or additives from a storage bin and into the loading unit in response to the vacuum;

pressurizing the loading unit; and

injecting the one of the catalyst and/or additives into the fluidized catalytic cracking unit in response to the pressurization of the loading unit.

48. The process of claim 47, further comprising monitoring a weight of the one of the catalyst and/or additives drawn into the loading unit and stopping generation of the vacuum when the weight reaches a predetermined value.

49. The process of claim 47, wherein generating a vacuum within a unit comprises initiating a flow of pressurized air through a vacuum producer in fluid communication with the loading unit.

50. The process of claim 47, wherein injecting the one of the catalyst and/or additives into the fluidized catalytic cracking unit in response to the pressurization of the loading unit comprises injecting the one of the catalyst and/or additive into a regenerator of the fluidized catalytic cracking unit.

51. The process of claim 47, wherein drawing one of the catalyst and/or additives from a storage bin and into the loading unit in response to the vacuum comprises opening a valve to place the storage bin in fluid communication with the loading unit.

52. The process of claim 51, further comprising drawing another of the catalyst and/or additives from another of the storage bins and into the loading unit in response to the vacuum by opening another of the valves to place the another of the storage bins in fluid communication with the loading unit.

53. The process of claim 47, wherein pressurizing the loading unit comprises opening a valve to place the loading unit in fluid communication with a source of pressurized air.

54. The process of claim 47, wherein generating a vacuum within a unit and drawing one of the catalyst and/or additives from a storage bin and into the loading unit in response to the vacuum comprises generating the vacuum in a dust collector of the loading unit and drawing one of the catalyst and/or additives from a storage bin and into the dust collector in response to the vacuum.

55. The process of claim 47, wherein pressurizing the loading unit and injecting the one of the catalyst and/or additives into the fluidized catalytic cracking unit in response to the pressurization of the loading unit comprises pressurizing a transfer pot of the loading unit and injecting the one of the catalyst and/or additives into the fluidized catalytic cracking unit from the transfer pot.

56. A process for loading catalyst and/or additives into a fluidized catalytic cracking unit, comprising:

storing at least one of the catalyst and/or additives at a first location;

vacuuming the at least one of the catalyst and/or additives into a unit positioned at a second location; and

injecting the at least one of a catalyst and/or additives into the fluidized catalytic cracking unit from the loading unit.

57. A system for introducing one or more particulate substances into a fluid stream, comprising:

dust collecting means in fluid communication with at least one storage bin holding the one or more particulate substances;

vacuum producing means in fluid communication with the dust collecting means so that the one or more particulate substances is drawn into the dust collecting means from the at least one storage bin by a vacuum; and

means for receiving the one or more particulate substances from the dust collecting means and injecting the one or more particulate substances into the fluid stream.